

REMARKS/ARGUMENTS

I. General Remarks

Please consider the application in view of the following remarks.

II. Disposition of Claims

Claims 1-35 are pending in this application. Claims 14, 16, 24, 26-29, 32 and 33 are amended herein and claim 23 is canceled.

III. Specification

The Examiner has objected to the specification for failing to provide proper antecedent basis for the claimed subject matter of claim 29, support for which the Examiner states is found only in the original claims. Claim 29 is directed to a limitation requiring a polymer containing about 40 to about 100% by weight C₆₋₁₀ alkyl acrylate. Applicants have amended the specification herein to include this material.

IV. Allowable Claims

In the previous office action, the previous Examiner advised that claims 2-5, 9-12 and 29-35 were allowable over the art of record and that claim 16 was objected to because of a minor informality. Claims 17-20, 22 and 25, dependent on claim 16, were also objected to because of this informality in claim 16. Applicants corrected the informality, which actually was simply the inability of a single strike though the number "14" to be detectible so that a double strike through had to be used. With this change or clarification, Applicants expected that these claims 16-20, 22 and 25 would be in condition for allowance as well.

In the present office action, the present Examiner withdrew the indicated allowability of claims 16-20, 22, 25, and 32 but indicated that claims 2-5, 9-12, 30, 31,

and 33-35 are allowed and that claim 32 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, 2nd paragraph and to include all of the limitations of the base claim and any intervening claims. Applicant has amended claim 32 accordingly and thus believes this claim is now in condition for allowance as well.

IV. Claim Objections

The Examiner has objected to claim 28 because of two clerical errors. Specifically, the Examiner has advised that the limitation “in a ratio ranging from about a 99:1 to about 60:40” should read “in a ratio ranging from about a 99:1 to about 60:40” (striking the “a” before 99:1) and that the limitation “about 25% to 99.95% weight” should read “about 25% to 99.95% by weight.” Applicants appreciate the Examiner’s careful review and have made these corrections in the claims.

The Examiner has objected to claim 29 as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Examiner has noted that Claim 30, from which claim 29 now depends, requires the polymer to comprise at least two monomers—a greater amount of a polar hydrophobic monomer and a lesser amount of a hydrophilic monomer—yet claim 29 allows the polymer to be 100% of a single monomer. Applicants have amended claim 29 accordingly.

VI. Rejection of Claims under 35 U.S.C. § 112, first paragraph

The Examiner has rejected claim 28 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner has explained that “the claim contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.” The Examiner

has stated that claim 28 recites a limitation with an endpoint ratio 60:40 not found in the specification, recites monomer weight ranges not found in the specification, and recites limitations of particles not found in the specification. Applicants appreciate the Examiner's careful review and have deleted the objectionable "new matter" from the claim, which was added inadvertently by mistakenly looking at notes for another application.

VII. Rejection of Claims under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claims 14-25, 27 and 32 under 35 U.S.C. § 112, second paragraph, as indefinite, or more particularly for being incomplete for "omitting essential steps, such omission amounting to a gap between the steps." The Examiner has explained that the omitted steps are: "steps relating to drilling in a subterranean formation" with respect to claims 14-25 and 32; and "steps related to making the drilling fluid claimed" with respect to claim 27.

Applicants have amended claim 14 accordingly. Claim 15 depends from claim 14 and thus the amendment to claim 14 is believed to satisfy the Examiner's rejection as to claim 15 as well. Applicants have also amended claims 16, 27 and 32 accordingly. Claims 17-25 depend from claim 16 and thus the amendment to claim 16 is believed to satisfy the Examiner's rejections as to these claims as well.

VIII. Rejection of Claims under 35 U.S.C. § 102 and/or 35 U.S.C. § 103

The Examiner has rejected claims 14, 15, 21, 23, and 26 as anticipated by or obvious from U.S. Patent No. 4,777,200 to Dymond under 35 U.S.C. § 102 or 35 U.S.C. § 103. The Examiner has stated that:

Dymond teaches an invert emulsion (Abstract) drilling fluid (Column 1 Lines 8-14) within the scope of the present invention, which comprises

copolymers having 25 to 100% of a polar hydrophobic monomer (Abstract and Column 6 Lines 40-63) such as the claimed 2-ethylhexyl acrylate (Column 7 Lines 19-23) and 0 to 20% of a hydrophilic monomer (Column 7 Lines 19-23) such as acrylic acid (Column 7 Lines 56-64) and that the copolymer may be in the form of particles coated with a hydrophilic coating (Column 7 Lines 23-33). Since the fluids may be used as drilling fluids, the use of "consisting essentially of" cannot distinguish.

Since Dymond teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the progressive gel and stress build behavior, suspension, fluid loss control, filtration control, thickening, yield and sag behavior and viscosity of the Dymond composition would inherently be the same as claimed. If there is any difference between the product of Dymond and the product of the instant claims the difference would have been minor and obvious.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 USC 102 and 103. "There is nothing inconsistent in concurrent rejections for obviousness under 35 USC 103 and for anticipation under 35 USC 102." [Citation omitted].

The Examiner has also rejected claims 1, 6-8, 13, 24, 27 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Dymond as applied to claims 14, 15, 21, 23 and 26 above in view of U.S. Patent No. 6,006,831 (Schlemmer hereinafter.) The Examiner has explained that:

Dymond teaches an invert emulsion drilling fluid within the scope of the present invention, which comprises copolymers having 25 to 100% of a polar hydrophobic monomer such as the claimed 2-ethylhexyl acrylate and 0 to 20% of a hydrophilic monomer such as acrylic acid and that the copolymer may be in the form of particles coated with a hydrophilic coating.

Dymond, while teaching mineral oil does not disclose expressly the use of a synthetic oil.

Schlemmer discloses a wellbore treatment fluid comprising any of aliphatic or aromatic mineral oils or synthetic hydrocarbons such as paraffins or olefins (Schlemmer Column 8 Lines 55-67).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to replace the mineral oil taught by Dymond with the synthetic paraffins or olefins of Schlemmer. The motivation to do so would have been the teaching of Schlemmer that they are functional equivalents.

Since Dymond and Schlemmer combine to teach the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the progressive gel and stress build behavior, suspension, fluid loss control, filtration control, thickening, yield and sag behavior and viscosity of the Dymond/Schlemmer composition would intrinsically be the same as claimed. If there is any difference between the product of Dymond and Schlemmer and the product of the instant claims the difference would have been minor and obvious.

Applicants respectfully traverse these rejections for the reasons stated in response to previous office actions discussing this reference, and for the reasons provided in Applicants' specification discussing this reference. It is disturbing that the Examiner would now argue that Dymond gives the public the benefit of Applicants' invention, when Applicant has discussed and contrasted Dymond to the present invention in the specification of the application and demonstrated with experimental data that Applicants' invention is not only different from the teachings of Dymond, but that Applicants' invention is superior in performance to the teachings of Dymond. The Examiner has even admitted that Dymond does not disclose or teach the use of synthetic based drilling fluids and ergo cannot *anticipate* Applicants' invention. That is, Dymond clearly lacks identity with Applicants' invention and therefore fails to meet the requirements of the statute, as interpreted by the courts. See, e.g., *Rowe v. Dror*, 1122 F.3d 473, 478-79; 42 U.S.P.Q.2d 1559, 1553-54 (Fed. Cir. 1997).

Further, Applicants respectfully traverse the Examiner's arguments that one skilled in the art would have been motivated to use synthetic fluids taught in Schlemmer with the materials taught in Dymond because Schlemmer allegedly teaches, according to the Examiner, that "they are functional equivalents." Schlemmer is directed to well logging—which is NOT known to those of ordinary skill in the relevant art as a "well treatment," although the Examiner has characterized the Schlemmer fluids as "well

treatment” fluids. Further, any equivalency in the fluids, or in the words of the Examiner, “functional equivalency,” that Schlemmer has taught concerns conductivity of the fluids, which is of importance to well logging. Such teaching is not the same as teaching equivalency with respect to interaction with additives or materials performing together as a drilling fluid. Persons of ordinary skill in the art well know that synthetic based fluids are not necessarily “functionally equivalent” to crude oils, diesel oils, mineral oils or other “natural” oils or even to other synthetic based fluids. The Examiner has nevertheless leaped from an alleged commonality respecting conductivity as relevant to well logging to saying that the fluids would therefore be equivalent as drilling fluids and then has summarily concluded that “If there is any difference between the product of Dymond and Schlemmer and the product of the instant claims the difference would have been minor and obvious.” Applicants respectfully traverse this reasoning and respectfully submit that the reasoning is improper and in conflict with the provisions of MPEP § 2144.03(a) which provides that, “It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are capable of instant and unquestionable demonstration as being well-known. Schlemmer does not enable the Examiner to meet this MPEP requirement—Schlemmer is concerned with an entirely different operation and a different type of fluid. As Applicants understand Schlemmer, that reference never states that the well logging fluid taught therein should be or even could be used alone as a drilling fluid.

Applicants previously argued that the Dymond reference provides no teaching or suggestion of a synthetic invert emulsion drilling fluid with the minimal elements claimed by Applicants and no teaching or suggestion of the effectiveness of a drilling

fluid with the minimal elements claimed by Applicants. Applicants specifically teach an advantage of their invention, over Dymond alone or combined with Schlemmer, in that Applicants' drilling fluid functions efficiently and effectively as a drilling fluid with fewer components than prior art fluids. See Applicants' specification at paragraphs [0009], [0017], [0019] and [0029]. Applicants' invention does not require the addition of fluid loss control agents, viscosifiers, or suspension agents to achieve desirable and even superior, fluid rheology over a broad temperature range.

The Examiner insists that Dymond "makes no teaching that a fluid loss control agent is required." Applicants beg to differ, however, and respectfully submit that the Examiner's understanding of Dymond can only be reached through application of Applicants' own teachings, that is, by viewing Dymond through the understanding and teachings that only Applicants have provided, for Dymond includes fluid loss control agents in every drilling fluid example, and even then does not teach utility over the broad temperature range taught by Applicants, which is a limitation in Applicants' claims. When Dymond does not specify a fluid loss agent, Dymond is not specifying the fluid for use in drilling. Certainly persons of ordinary skill in the art would not use ingredients or additives that were not considered needed. Additional additives increase costs and require space, which Applicants teach is especially at a premium offshore. Persons of ordinary skill in the art would understand Dymond to use the least number of components thought necessary to formulate a drilling fluid. Persons of ordinary skill in the art who would read Dymond would presume that, if the components were not combined as shown, some inferior or useless product would result. *In re Freed*, 425 F.2d 785, 165 U.S.P.Q. 570, 572 (C.C.P.A. 1970). Applicants submit that Dymond reflects the

teachings and recognition of the art – that a fluid loss control agent would be needed in a drilling fluid having the other components listed. *Id.*

Moreover, Applicants' have demonstrated with laboratory testing described in their specification that the Dymond fluid does not achieve the advantages of Applicants' invention.

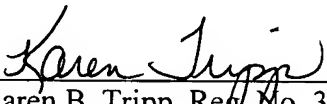
Applicants respectfully request that the Examiner reconsider his rejections. The public does not have the benefits of Applicants' invention without Applicants' invention and teachings.

SUMMARY

Applicants respectfully submit that all of the pending claims, as amended, are in condition for allowance and Applicants respectfully request the Examiner to enter the amendments and to allow the application to proceed to issue.

Respectfully submitted,

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